Electrical Spring Connector 412

Data Sheet

Application

The 3M™ Electrical Spring Connector 412 will electrically connect copper conductors in a pigtail application.

Wire

AWG Range
Copper conductors only, No. 22 through 8 solid and/or stranded.
(See wire matrix for specific combinations)

Metric Range
Copper conductors only, .5mm^2 thru 6mm^2 ridged (solid or stranded).

Construction

Spring - Spring steel, corrosion-resistant coating
Insulator – PVC

Weight

0.0068 lbs (3,1 grams)

Performance Test

The following tests were performed to the specifications of UL Standard 486C and CSA Standard C22.2 No. 188.

Static Heating	Pass
Secureness	Pass
Pullout	Pass
Dielectric Voltage Withstand	Pass
Secureness of Insulation	Pass
Flammability	V2 Min.

Engineering Specification

3M Spring Connector 412 is capable of a 1 conductor termination or a 2 or more conductor connection in a pigtail application. The connector shall be UL listed and CSA certified as a pressure wire connector. The connector shall be rated 600 volts maximum for building wire and 1000 volts maximum for lighting fixtures. The connector shall have a maximum operating temperature of 105°C (221°F).

Installation Instructions

⚠ Caution

Turn power off before installing or removing terminal. All electrical work should be done according to appropriate electrical codes.

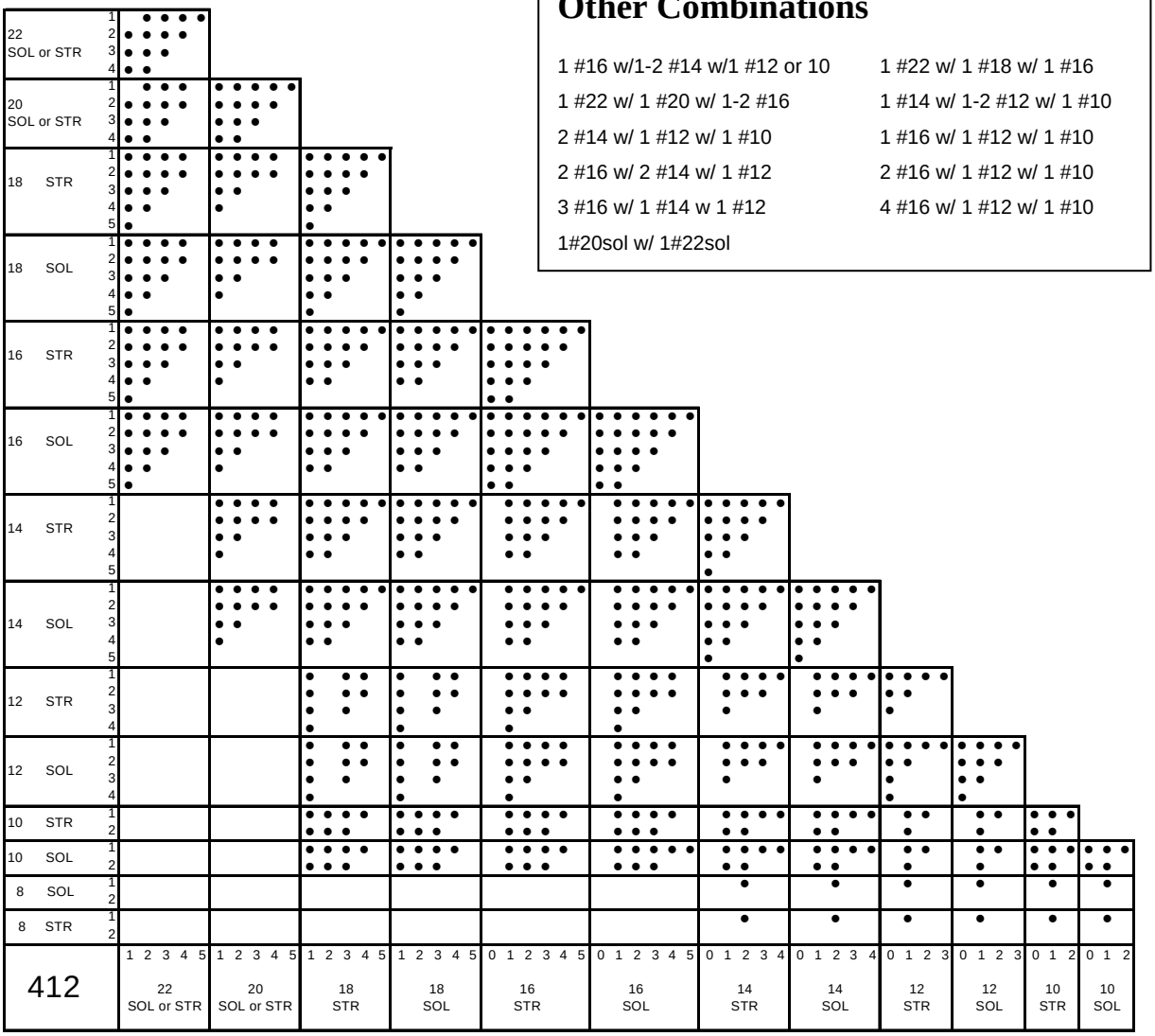
1. Strip wire insulation ½ inch.
2. Firmly grasp wires and ensure conductor ends are even. Conductors may be twisted or untwisted.
3. Place connector over the stripped conductor tips.
4. Turn connector on in a clockwise direction until secure.
5. To remove, turn connector counter-clockwise.

Regulatory Agencies

UL Listed as a Wire Connector, tested per UL Standard 486C, UL File No. E23438
Operating Temperature: 105°C (221°F)
Voltage Rating: 600 volts max building wire, 1000 volts max signs and fixtures.

CSA Certified
CSA Standard C22.2 No. 188, CSA File No. LR15503
Operating Temperature: 105°C (221°F)
Voltage Rating: 600 volts max building wire, 1000 volts max signs and fixtures.

Wire Matrix



Other Combinations

1 #16 w/1-2 #14 w/1 #12 or 10	1 #22 w/ 1 #18 w/ 1 #16
1 #22 w/ 1 #20 w/ 1-2 #16	1 #14 w/ 1-2 #12 w/ 1 #10
2 #14 w/ 1 #12 w/ 1 #10	1 #16 w/ 1 #12 w/ 1 #10
2 #16 w/ 2 #14 w/ 1 #12	2 #16 w/ 1 #12 w/ 1 #10
3 #16 w/ 1 #14 w 1 #12	4 #16 w/ 1 #12 w/ 1 #10
1#20sol w/ 1#22sol	

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